

00C#136

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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(541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: M107005

CLIENT: BRISTOL
REPORT TO: ANNE KRANAWETTER
ADDRESS: AMCHITKA ISLAND, AK
PHONE: 907-770-0974 FAX: 770-0975

INVOICE TO: BRISTOL

P.O. NUMBER: 21090

PROJECT NAME: AMCHITKA
PROJECT NUMBER: 21090

SAMPLED BY:

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyses

☐ 10 ☐ 7 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1

STD.

Petroleum Hydrocarbon Analyses

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1

STD.

Please Specify

OTHER

*Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME		REQUESTED ANALYSES												MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
				PAD	BTX w/ Naph														
1. OIAM A1202SL		7/2/01 1125		X	X											S	2		
2. OIAM A1203SL		7/2/01 1130		X	X											S	2		
3. OIAM A1204SL		7/2/01 1135		X	X											S	2		
4. OIAM A1205SL		7/2/01 1140		X	X											S	2		
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			
11.																			
12.																			
13.																			
14.																			
15.																			

RELINQUISHED BY: Douglas V. Gut
PRINT NAME: Douglas V. Gut FIRM: BRISTOL
DATE: 7/2/01 TIME: 1814

RECEIVED BY: Stephen Wilson
PRINT NAME: Stephen Wilson FIRM: NCA
DATE: 7/2/01 TIME: 1814

RELINQUISHED BY:
PRINT NAME: FIRM: DATE: TIME:

RECEIVED BY:
PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS: AGT A-12 AREA Non-Regulated



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541.383.9310 fax 541.382.7588

7 December, 2001

Anne Kranawetter
Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 07/02/01 18:14. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson
Environmental Group Leader

Work Orders included in this report:

M107005



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Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMA1202SL	M107005-01	Soil	07/02/01 11:25	07/02/01 18:14
01AMA1203SL	M107005-02	Soil	07/02/01 11:30	07/02/01 18:14
01AMA1204SL	M107005-03	Soil	07/02/01 11:35	07/02/01 18:14
01AMA1205SL	M107005-04	Soil	07/02/01 11:40	07/02/01 18:14

COC #136

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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North Creek Analytical, Inc.
Environmental Laboratory Network

1 of 7



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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:31

Diesel Hydrocarbons (C10-C25) per AK102
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA1202SL (M107005-01) Soil						Sampled: 07/02/01 Received: 07/02/01			
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/02/01	07/02/01	0107010	
Surr: 1-Chlorooctadecane	75.5 %	50-150							
Surr: Triacontane	84.7 %	50-150							
01AMA1203SL (M107005-02) Soil						Sampled: 07/02/01 Received: 07/02/01		D-04,D-14a	
Diesel Range Organics	584	150	mg/kg dry	1	AK 102	07/02/01	07/02/01	0107010	D-16
Surr: 1-Chlorooctadecane	83.0 %	50-150							
Surr: Triacontane	94.6 %	50-150							
01AMA1204SL (M107005-03) Soil						Sampled: 07/02/01 Received: 07/02/01			
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/02/01	07/02/01	0107010	
Surr: 1-Chlorooctadecane	78.5 %	50-150							
Surr: Triacontane	86.3 %	50-150							
01AMA1205SL (M107005-04) Soil						Sampled: 07/02/01 Received: 07/02/01		D-14,D-04	
Diesel Range Organics	264	150	mg/kg dry	1	AK 102	07/02/01	07/03/01	0107010	
Surr: 1-Chlorooctadecane	85.4 %	50-150							
Surr: Triacontane	90.9 %	50-150							

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Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:31

BTEX, MTBE and Naphthalene per EPA Method 8021B
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
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01AMA1202SL (M107005-01) Soil

Sampled: 07/02/01 Received: 07/02/01

Benzene	ND	0.0549	mg/kg dry	50	1B BTEX/MTI	07/04/01	07/04/01	0107019	
Toluene	ND	0.220	"	"	"	"	"	"	
Ethylbenzene	ND	0.220	"	"	"	"	"	"	
Xylenes (total)	ND	0.439	"	"	"	"	"	"	
Naphthalene	ND	2.20	"	"	"	"	"	"	

Surr: 4-BFB 75.0 % 50-150

01AMA1203SL (M107005-02) Soil

Sampled: 07/02/01 Received: 07/02/01

Benzene	ND	0.0644	mg/kg dry	50	1B BTEX/MTI	07/04/01	07/04/01	0107019	
Toluene	ND	0.257	"	"	"	"	"	"	
Ethylbenzene	ND	0.257	"	"	"	"	"	"	
Xylenes (total)	ND	0.515	"	"	"	"	"	"	
Naphthalene	ND	2.57	"	"	"	"	"	"	

Surr: 4-BFB 75.5 % 50-150

01AMA1204SL (M107005-03) Soil

Sampled: 07/02/01 Received: 07/02/01

Benzene	ND	0.0501	mg/kg dry	50	1B BTEX/MTI	07/04/01	07/04/01	0107019	
Toluene	ND	0.200	"	"	"	"	"	"	
Ethylbenzene	ND	0.200	"	"	"	"	"	"	
Xylenes (total)	ND	0.401	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	

Surr: 4-BFB 77.8 % 50-150

01AMA1205SL (M107005-04) Soil

Sampled: 07/02/01 Received: 07/02/01

Benzene	ND	0.0700	mg/kg dry	50	1B BTEX/MTI	07/04/01	07/04/01	0107019	
Toluene	ND	0.280	"	"	"	"	"	"	
Ethylbenzene	ND	0.280	"	"	"	"	"	"	
Xylenes (total)	ND	0.560	"	"	"	"	"	"	
Naphthalene	ND	2.80	"	"	"	"	"	"	

Surr: 4-BFB 72.6 % 50-150

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Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:31

Physical Parameters per APHA/ASTM/EPA Methods
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA1202SL (M107005-01) Soil					Sampled: 07/02/01 Received: 07/02/01				
% Solids	87.5	0.0100 % by Weight		1	Gravimetric	07/02/01	07/03/01	0107014	
01AMA1203SL (M107005-02) Soil					Sampled: 07/02/01 Received: 07/02/01				
% Solids	86.0	0.0100 % by Weight		1	Gravimetric	07/02/01	07/03/01	0107014	
01AMA1204SL (M107005-03) Soil					Sampled: 07/02/01 Received: 07/02/01				
% Solids	83.7	0.0100 % by Weight		1	Gravimetric	07/02/01	07/03/01	0107014	
01AMA1205SL (M107005-04) Soil					Sampled: 07/02/01 Received: 07/02/01				
% Solids	81.2	0.0100 % by Weight		1	Gravimetric	07/02/01	07/03/01	0107014	

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Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:31

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 0107010 - 3545 ASE

Blank (0107010-BLK1)

Prepared & Analyzed: 07/02/01

Diesel Range Organics	ND	150	mg/kg wet						
Surr: 1-Chlorooctadecane	20.7		"	23.7		87.3	50-150		
Surr: Triacontane	21.8		"	23.5		92.8	50-150		

LCS (0107010-BS1)

Prepared & Analyzed: 07/02/01

Diesel Range Organics	1050	150	mg/kg wet	1250		84.0	75-125		
Surr: 1-Chlorooctadecane	17.5		"	23.7		73.8	50-150		
Surr: Triacontane	20.8		"	23.5		88.5	50-150		

LCS Dup (0107010-BSD1)

Prepared & Analyzed: 07/02/01

Diesel Range Organics	1120	150	mg/kg wet	1250		89.6	75-125	6.45	20
Surr: 1-Chlorooctadecane	20.2		"	23.7		85.2	50-150		
Surr: Triacontane	20.9		"	23.5		88.9	50-150		

Matrix Spike (0107010-MS1)

Source: M106095-07RE1

Prepared & Analyzed: 07/02/01

Diesel Range Organics	1720	150	mg/kg dry	1570	ND	109	60-140		
Surr: 1-Chlorooctadecane	24.5		"	29.8		82.2	50-150		
Surr: Triacontane	28.2		"	29.6		95.3	50-150		

North Creek Analytical - Mobile Lab

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Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:31

BTEX, MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 0107019 - MeOH Extraction

Blank (0107019-BLK1)

Prepared & Analyzed: 07/04/01

Benzene	ND	0.0250	mg/kg wet
Toluene	ND	0.100	"
Ethylbenzene	ND	0.100	"
Xylenes (total)	ND	0.200	"
Naphthalene	ND	1.00	"

Surr: 4-BFB 2.30 " 2.50 92.0 50-150

LCS (0107019-BS1)

Prepared & Analyzed: 07/04/01

Benzene	2.02	0.0250	mg/kg wet	2.50	80.8	69-138
Toluene	2.20	0.100	"	2.50	88.0	53-151
Ethylbenzene	2.47	0.100	"	2.50	98.8	61-141
Xylenes (total)	7.07	0.200	"	7.50	94.3	62-141
Naphthalene	2.51	1.00	"	2.50	100	65-135

Surr: 4-BFB 2.57 " 2.50 103 50-150

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Project: Amchitka
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Reported:
07/04/01 18:31

Notes and Definitions

D-04 The hydrocarbons present in this sample are a complex mixture of diesel range and heavy oil range organics.

D-14 Hydrocarbon pattern and range are consistent with RRO, estimated at 407 mg/kg.

D-14a Hydrocarbon pattern and range are consistent with RRO, estimated at 561 mg/kg.

D-16 Detected hydrocarbons in the diesel do not have a distinct diesel pattern and may be due to heavily weathered diesel.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

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Environmental Laboratory Network

7 of 7

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M107005 FINAL 07 04 01 1831.mdb Default Report (not modified)
M107005-02	AK102 (DRO)	Diesel Range Organics	D-14a
M107005-02	AK102 (DRO)		D-04
M107005-02	AK102 (DRO)		D-16
M107005-04	AK102 (DRO)		D-04
M107005-04	AK102 (DRO)		D-14